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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,840	02/10/2004	Carey J. Naquin	1391-46000	1645
23505	7590	10/23/2006	EXAMINER	
CONLEY ROSE, P.C. P. O. BOX 3267 HOUSTON, TX 77253-3267			BOMAR, THOMAS S	
			ART UNIT	PAPER NUMBER
			3672	

DATE MAILED: 10/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/775,840

Applicant(s)

NAQUIN ET AL.

Examiner

Shane Bomar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33, 37-39 and 41-59 is/are pending in the application.
- 4a) Of the above claim(s) 58 and 59 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 7, 13-23, 25, 26, 32, 33, 37-39, 41-46 and 51-54 is/are rejected.
- 7) ☒ Claim(s) 5, 8-12, 24, 27-31, 47-50 and 55-57 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 15, 2006 has been entered.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1-4, 6, 7, 13-23, 25, 26, 32, 33, 37-39, 41-46, and 51-54 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent 5,215,444 to Bishoff.

Regarding claims 1, 14, 15, 18-20, and 41-42, Bishoff discloses a flowbore fluid temperature control system and associated method for use comprising: a control system body 38 comprising a flowbore (defined by inlet 40 and outlet 42) extending through the length of the body; a valve mechanism 48 within the body that controls the flow of a fluid through the flowbore while maintaining the flowbore fluid in the body flowbore (see col. 7, lines 27-54, wherein the valve mechanism controls when a portion of the fluid flowing through the flowbore is diverted through outlet 44, although fluid is maintained in the flowbore at all times); the fluid acts as an actuator to adjust the valve mechanism, although the spring can also be considered the actuator; an operating system 18 that operates the actuator and controls the flowbore fluid

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pressure; and the temperature of the fluid is controlled by controlling the pressure drop of the fluid across the valve mechanism (see Fig. 1; col. 8, line 18 through col. 9, line 13; and col. 13, line 23 through col. 14, line 55).

Regarding claims 2, 3, 22, 37-39, 43, 44, 51, and 52, the portion of the body 38 that directly surrounds the piston 48 acts as a sleeve with multiple ports therethrough that allow fluid to flow into annular areas delineated by paths 58, 54, and 110 (see Fig. 1)

Regarding claims 4 and 23, it is notoriously known in the art to provide sliding pistons with seals to prevent flow past the piston (see for example the US patent 4,176,630 to Elmer).

Regarding claims 6, 7, 25, 26, 45, 46, 53, and 54 springs interact with the piston (see Figs. 1-4).

Regarding claims 13, 32, and 33, pump 20 controls the fluid pressure and operating system 18 operates the actuator and controls the flowbore fluid pressure (see Fig. 1).

Regarding claims 16, 17, and 21, bar 47 and orifice assembly 68 are single position valve mechanisms also used in valve 36 (see Fig. 1).

Allowable Subject Matter

4. Claims 5, 8-12, 24, 27-31, 47-50, and 55-57 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments filed August 15, 2006 have been fully considered but they are not persuasive. The Applicant argues that Bishoff's valve mechanism does not control fluid flow through and maintain the fluid in the flowbore defined by inlet 40 and outlet 42. I respectfully contend that fluid is maintained in the flowbore at all times because only a portion of the flow can be diverted to the valve mechanism 48. The flow is diverted through the valve mechanism 48 to outlet 44 only when the mechanism 48 is in a position that opens port 50, either partially or fully. When flow is not diverted through the outlet 44, then the full stream of fluid flow goes through the flowbore. Therefore, the valve mechanism 48 must control the flow into the flowbore of Bishoff.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shane Bomar whose telephone number is 571-272-7026. The examiner can normally be reached on Monday - Thursday from 6:30am to 4:00pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David J. Bagnell
Supervisory Patent Examiner
Art Unit 3672

tsb



October 19, 2006